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# Postpartum sterilisation and demographic progress at Paarl Hospital

V. P. DE VILLIERS

## Summary

**The success of the postpartum sterilisation campaign at Paarl Hospital, CP, irrefutably supports the claim that a quality family planning programme can in itself reduce fertility. In 1971 only 10% of women undergoing sterilisation had 4 or fewer children — this incidence increased to 71% in 1986. Women with more than 10 children are now very rarely found — in 1970 they still accounted for 20% of all patients sterilised. Parity at time of sterilisation has levelled to about 4 in contrast with 7,52 in 1971. It is probable that as many as 15 000 unwanted and unplanned pregnancies have been prevented in Paarl as a result of this sustained effort. The ideal of the 2-child family is increasingly possible.**

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Postpartum sterilisation either by transumbilical mini-laparotomy or accompanying caesarean section has been freely available at Paarl Hospital, CP, ever since the service was initiated by enthusiastic and committed private practitioners there in 1969.[1] Statistics of these patients have been recorded since 1970 and an article published in 1976 indicated a dramatic fall in the number of children patients had at time of postpartum sterilisation.[2] As early as 1974 a total of 33,9% of all women sterilised had 4 or fewer babies. This demographic implication was severely rebuffed by the then Secretary for Health, who feared that sterilisation would be politicised.[3] Consequently, further publications from Paarl Hospital concentrated on issues such as sterilisation failure with the different tube techniques,[4,5] and suggested alternate methods of sterilisation.[6,7] The safety of sterilisation was stressed.[8]

**Department of Obstetrics and Gynaecology, University of Stellenbosch, Parowvallei, CP and Paarl Hospital, Paarl, CP**
V. P. DE VILLIERS, F.R.C.O.G.

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In 1984 the political ghost of family planning was finally laid to rest at the World Conference of Population in Mexico City.[9] This reversed the argument put forward by most developing countries at the 1974 World Conference of Population in Bucharest that 'development was the best contraceptive' and that if governments took 'care of the population, the population would take care of itself'. General agreement was reached in Mexico City that: (*i*) it is important to reduce high fertility to improve the living conditions of individuals; (*ii*) it is possible to reduce fertility in countries where the economy is not well developed; and (*iii*) fertility is best reduced and living conditions improve most rapidly in those countries that have both a strong family planning programme and strong traditional development (e.g. improving women's status, broadening education, modernising the economy). A strong family planning effort includes such factors as policies on age of marriage, availability of sterilisation and abortion as well as modern contraceptive methods, and involvement of the mass media in education and communication.

Today, family planning programmes are totally internationalised and a recent publication from this institution depoliticises the issue and emphasises that voluntary sterilisation is a basic service which should be available everywhere and which should be carried out within hours of delivery even on Saturdays and Sundays.[10] No unfavourable criticism was elicited. Even neighbouring Zimbabwe and Botswana have recently openly advocated and introduced quality family planning programmes.[11]

This report illustrates how a voluntary sterilisation campaign can contribute significantly at the time of childbirth to reducing the number of children a patient will have.

## Patients and methods

At Paarl Hospital great emphasis is put on adequate counselling of every patient. As part of its comprehensive antenatal care all booked patients are informed about sterilisation and the various

methods available are explained. Several audiovisual programmes are presented in an attempt to cater specifically for the background of each patient: an *isi*-Xhosa programme for Xhosa women, a suitable film for farm labourers, and a vasectomy programme for couples considering this method of permanent surgical contraception. Patients attend in groups and two motivators lead them in discussion.

The goal with each patient is to obtain total informed consent and thus a consent form is signed and witnessed, preferably months before the operation. Counselling at the time of delivery is avoided except with grand multiparous women, since these women often are unbooked patients. The right to be sterilised at any age if a woman has 2 healthy children is emphasised.

The anaesthetic used is either an epidural performed by the obstetrician or a general anaesthetic. Theatre facilities are available at Paarl Hospital every day of the week including Saturdays, Sundays and public holidays. The surgical procedures are at present either a transumbilical mini-laparotomy and tubal ligation by the Vienna method or concurrent sterilisation at time of caesarean section by the Irving method.

A total of 30 042 women delivered at the University of Stellenbosch Maternity Unit at Paarl Hospital between January 1971 and 31 December 1986. The number of postpartum sterilisations totalled 4 942 (16,45%).

## Results

The average number of children per patient at time of sterilisation in 1971 was 7,52. This fell consistently to 4,04 in 1982. Since then the parity has levelled (Fig. 1). Women with extensive parity (those with 10 or more children) were common before 1971 with an incidence of 20,3% of those sterilised in 1970. This group has now virtually disappeared and only forms 0,56% of those sterilised in 1986 (Fig. 2).

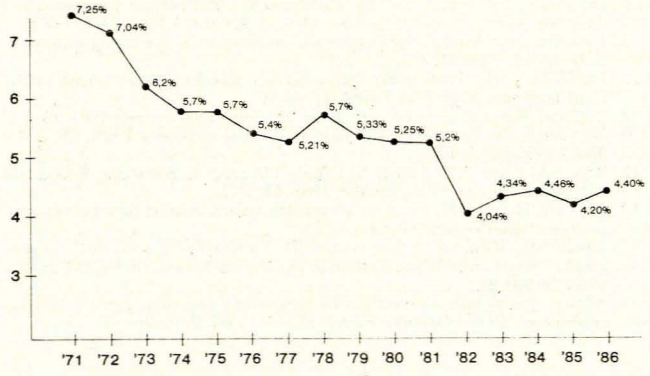


**Fig. 1. Average parity of mothers at the time of sterilisation.**

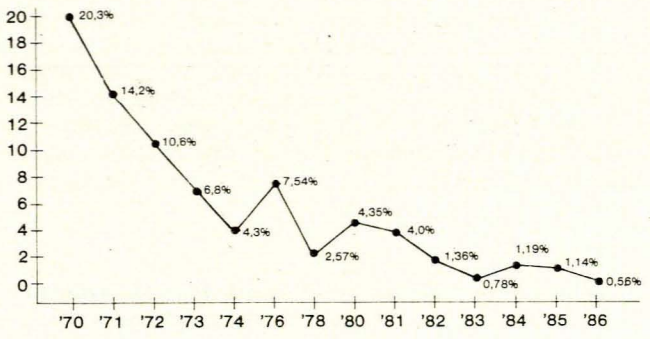


**Fig. 2. Percentage of patients sterilised postpartum with a parity of 10+.**

There is an increasing demand for sterilisation from women bearing their fourth or earlier child — a total of 71,23% of all women sterilised in 1986 compared with the only 10% in 1971 (Fig. 3). Even women with 3 children are asking for sterilisation — 39,94% requiring postpartum sterilisation in 1986 (Fig. 4). Since 1985 the ultimate goal of sterilisation for women with 2 children has been propagated (Fig. 4).

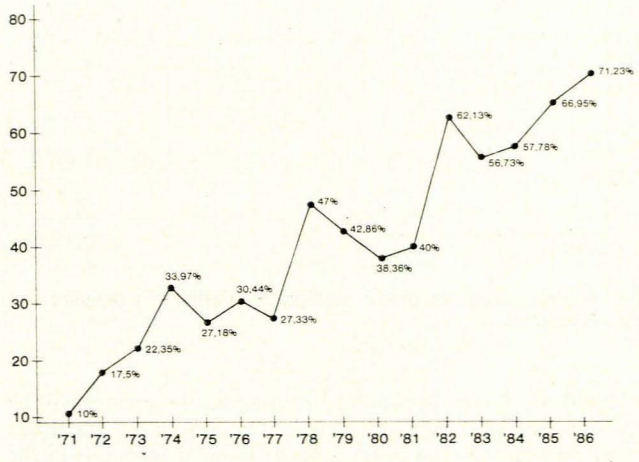


**Fig. 3. Percentage of patients sterilised postpartum with a parity of 4 or less.**

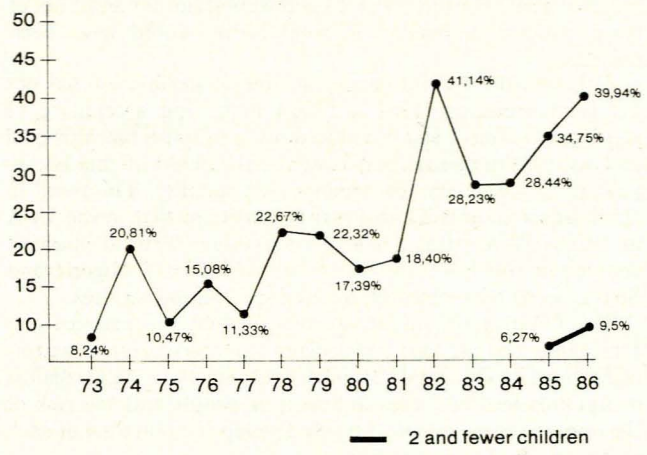


**Fig. 4. Percentage of patients sterilised postpartum with a parity of 3 or less.**

The grand multipara was common before postpartum sterilisation was encouraged in 1971 (30,5% of all patients delivered in 1971 and 33,7% in 1972). Fig. 5 shows the percentage of grand multiparas in all women delivering at Paarl Hospital. In 1986 only 7% of patients in the hospital were grand multiparas.

## Discussion

Since the average number of children per patient at the time of sterilisation has now levelled to 4 after previously averaging 7,52, it is fair to deduce that more than 3 pregnancies (probably unwanted and unplanned) are averted with every sterilisation. Accordingly, 15 000 such pregnancies have been prevented in Paarl since almost 5 000 postpartum sterlisations have been carried out in the 15 years since 1971. In the Philippines it is reckoned that 2,7 births are prevented with every sterilisation.[12] Obviously the younger the patient and the fewer the number

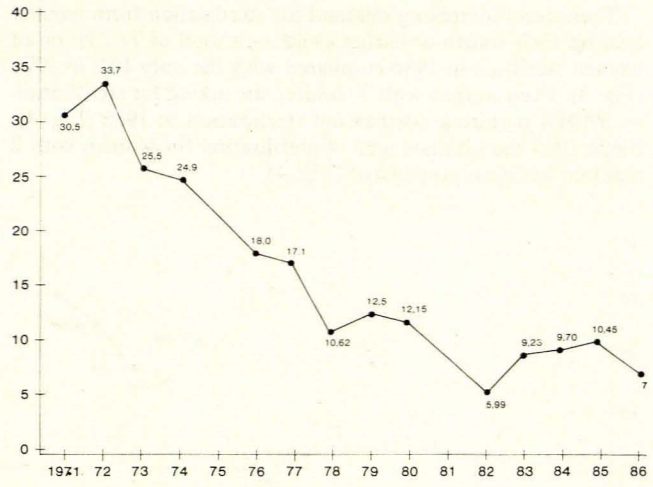


**Fig. 5. Percentage of grand multiparas (parity 5+) delivered at Paarl Hospital.**

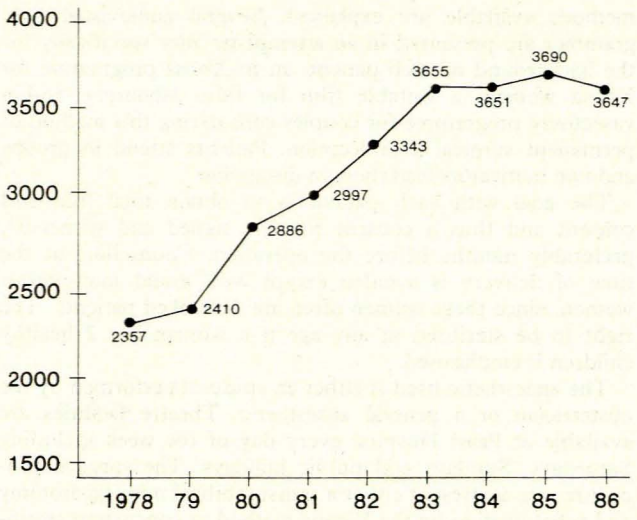


**Fig. 6. Number of deliveries at Paarl Hospital.**

of children she has at time of sterilisation, the greater will be the number of births prevented. The results of the Paarl campaign can be seen in the smaller number of pupils in the junior schools and the disappearance of two-session classes. Improved education and standards must result. Since 1982 there has been no significant increase in the total number of births at Paarl Hospital (Fig. 6) and were it not for an influx of black patients, a decline in total births would have been recorded.

Although the 4-child barrier at time of sterilisation has not yet been breached (1982 - 1986), increasing acceptance of sterilisation after 2 and 3 children gives promise that this goal will soon be reached. Paarl is at the threshold of this breakthrough so necessary for demographic stability. The trend in sterilisation acceptance in Paarl is similar to that in the USA in 1970 - 1975,[13] but not as good as the 39% of all married couples in the USA in 1983.[12] In Africa both Nigeria and Sierra Leone have recently initiated sterilisation services.

South Africa should unashamedly adopt the practice and achievement of the East and acclaim voluntary surgical contraception as its first and foremost weapon in its fight against overpopulation, underdevelopment of people and the lack of the opportunities so necessary to develop the potential of each and every child in our country.

Demographic stability in the modern world is not a dream but a reality if quality family planning is both established and sustained.

Community obstetric centres such as the one in Paarl should be established throughout South Africa with obstetricians and demographers in control.

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